FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

OMB APPROVAL

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longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)												
Name and Address of Reporting Person Glasser Lance A	2. Issuer Name and KLA TENCOR			0 1	l	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner						
(Last) (First) C/O KLA-TENCOR CORPORAT ROBLES	3. Date of Earliest T 03/01/2006	ransaction (Mont	h/Day/Ye	ar)	X_Officer (give title below) Other (specify below) Executive Vice President						
(Street) SAN JOSE, CA 95130	4. If Amendment, D	ate Original	Filed	(Month/Day	/Year)	6. Individual or Joint/Group Filing(Check Applicable Line) _X_Form filed by One Reporting Person _Form filed by More than One Reporting Person						
(City) (State)	(Zip)	Table I - Non-Derivative Securities Acqu						nired, Disposed of, or Beneficially Owned				
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transact Code (Instr. 8)	tion	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D)	7. Nature of Indirect Beneficial Ownership		
		(iviolitii/Day/ i ear)	Code	v	Amount	(A) or (D)	Price	(liisti. 3 diid 4)				
Common Stock	03/01/2006		M		5,000	A	\$ 10.63	8,914	D			
Common Stock	03/01/2006		S		5,000	D	\$ 53.23	3,914	D			
Common Stock-Restricted Stock Units (1)								33,333	D			
Reminder: Report on a separate line for each	ch class of securities	beneficially owned di		Pers	ons who			e collection of information contai	ned SEC	1474 (9-02)		

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

displays a currently valid OMB control number.

(e.g., puts, caus, warrants, options, convertible securities)															
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	*****	3A. Deemed Execution Date, if any (Month/Day/Year)	Code	tion	of Deri Secu Acq (A) Disp of (I	ivative urities uired or bosed D) tr. 3, 4,	Expiration Date (Month/Day/Year)		of Underlying Securities (Instr. 3 and 4)		Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	Direct (D) or Indirect	Beneficial
				Code	V	(A)		Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Non- Qualified Stock Option (right to buy)	\$ 10.63	03/01/2006		М			5,000	08/31/1999	08/31/2008	Common Stock	5,000	\$ 53.23	5,000	D	
Non- Qualified Stock Option (right to buy)	\$ 26.25							11/10/2001	11/10/2010	Common Stock	5,000		5,000	D	
Non- Qualified Stock Option (right to buy)	\$ 29.31							10/02/2002	10/02/2011	Common Stock	22,500		22,500	D	

Non- Qualified Stock Option (right to buy)	\$ 32.75			04/04/2002	04/04/2011	Common Stock	5,000	5,000	D	
Non- Qualified Stock Option (right to buy)	\$ 33.75			10/27/2000	10/27/2009	Common Stock	20,000	20,000	D	
Non- Qualified Stock Option (right to buy)	\$ 34.67			11/08/2003	01/28/2013	Common Stock	9,000	9,000	D	
Non- Qualified Stock Option (right to buy)	\$ 37.05			11/08/2003	11/08/2012	Common Stock	4,500	4,500	D	
Non- Qualified Stock Option (right to buy)	\$ 40.66			10/27/2004	08/02/2014	Common Stock	3,750	3,750	D	
Non- Qualified Stock Option (right to buy)	\$ 41.79			09/21/2005	09/21/2014	Common Stock	75,000	75,000	D	
Non- Qualified Stock Option (right to buy)	\$ 42.28			11/30/2000	11/30/2009	Common Stock	10,000	10,000	D	
Non- Qualified Stock Option (right to buy)	\$ 44.6875			08/13/2000	08/13/2010	Common Stock	10,000	10,000	D	
Non- Qualified Stock Option (right to buy)	\$ 45.16			10/27/2004	04/26/2014	Common Stock	6,250	6,250	D	
Non- Qualified Stock Option (right to buy)	\$ 47.95			09/26/2006	09/26/2012	Common Stock	75,000	75,000	D	
Non- Qualified Stock Option (right to buy)	\$ 51.229			11/08/2003	07/30/2013	Common Stock	4,500	4,500	D	

Non- Qualified Stock Option (right to buy)	\$ 53.86				10/27/2004	10/27/2013	Common Stock	10,000	10,000	D	
Non- Qualified Stock Option (right to buy)	\$ 58.10				10/27/2004	01/27/2014	Common Stock	5,000	5,000	D	

Reporting Owners

	Relationships								
Reporting Owner Name / Address	Director	10% Owner	Officer	Other					
Glasser Lance A C/O KLA-TENCOR CORPORATION 160 RIO ROBLES SAN JOSE, CA 95130			Executive Vice President						

Signatures

By: Stuart J. Nichols For: Lance A. Glasser	03/01/2006
**Signature of Reporting Person	Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- $(1) \ \ \text{Each restricted stock unit represents a contingent right to receive one share of KLAC common stock. }$

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.